

TRADE IN ELECTRICITY

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ABSTRACT: For needs traffic in electric energy arose in last year new business platform wearing title Prague energy exchange or PXE. This House booted on market with electric energy competitive environment and on helped so his liberalization. PXE offers possibility traffic futures contracts namely for participants, who answer all appurtenances on interface to the business system House. Personal business proceeds in electronic system House. The get - together, who by contract fills PXE offer uninterrupted awards on choice contracts namely how on selling so and on purchase side are give a name creators market. These subject, which constitute above all clearing market banks interlock all back payments related show - downs futures contracts with electricity do show - down entirely in EUR. Get - together traffic are obligatory allowances provide guarantees behind show - down his businesses in practice margin. Height margin establishes House namely on individual set futures contracts. Final show - down physical supplies then proceeds every day throughout month, in which is given to set futures business in van period. Net price amount is again in EUR, topped about VAT. Rise power House then switched tenet purchase energy, which of principle in a way works course and processes firms. Companies he began offer possibility determine way purchase energy, drive diversification connected with growth awards electricity and work so his competitive advantage.

KEY WORDS: Seat power control energy, Prague energy exchange (PXE), Securities exchange (BCPP), Futures contracts Power regulation office (ERU), Operator market with electricity (revolutions per minute), Clearing market bank, Distribution network, Margin deposit, Check limit, Vindictive limit, Rules show - down, Continual traffic, Central Counterparty

1 INTRODUCTION

When the will get on world's Houses to movement prices crude oil, sooner or later it all will feel near filling stations. These running changes are today already harrow impliedly. Just like that is that and with electricity because is it goods be like any other. As far as behaviour Prague energy exchange brought to the Czech Republic catch it gadgetry business and production prices seat power control energy. Animo create power House come securities exchange Prague (BCPP), which after tuitions with ministry industry and business and in conjunction with operator in the marketplace with electricity arbitrated set up transparent market with electric energy. Licence for creation Prague energy exchange (PXE) got BCPP in February of the year 2007. On power House then he began really do business 17. July 2007. Power House from under beginning unconcealed aim become significant player, that would work price electricity in middle Europe. Main aim new House was create price electricity transparent in a way compared to previous system, when was price based above all on sales power companies CEZ. Transparency price fixing department production was in addition and by one of needs resulting from liberalization European market with energies. In spite of in preceding years get in this direction to significant progress, liberalization market with energies in Europe always clash with above all on unwillingness some member states open native power line external competition, poverty of temporary carrier capacities or effective application European law recipes.

2 PRAGUE ENERGY EXCHANGE - PXE

Prague energy exchange (PXE, <http://www.pxe.cz>) is new business platform intended for traffic in electric energy in Czech Republic and on Slovakia.

Traffic in electricity by he came in to the unprecedented period, in which about price tells largely relation actual offers and demand.

Prague energy exchange is the first market sui generis in Central and Eastern Europe. Inspiration for her rise and system pricing were in Europe functional power House. His activity wants create strong and standardized basis for traffic in electric energy, namely how from look sizes, so and solidity.

Prague energy exchange booted on market with electric energy competitive environment and helped so his liberalization. Ensured to all participants House same conditions for traffic regardless of size their operation. Once from biggest device traffic in energy on Prague energy exchange is transparence pricing seat power control energy, which is based on identical tenets familiarly functional and in by other states European Union.

One of the biggest contributions new market is continual traffic seat power control energy namely not only for a year, but on whole for three years forward. This fact brought on market price freeze, facilitate predicate development prices and espressivo by redounded to elimina-tion priceshock.

Behaviour new power House has positive fall not only on her participants, but in final consequence positive screens also to the sales electricity end consumers and users.

3 TRAFIC FUTURES CONTRACTS WITH ELECTRICITY

3.1 Basic requirements

PXE offers potential interested person possibility traffic futures contracts on supply seat power control energy with physical settlement. Persons concerned, who have about that manner traffic focus, must realize next appurtenances:

- Participant traffic is able to be merely Czech juridical person and must be payer VAT;
- Own licence ERU to traffic in electric energy;
- Be subject show - down near operator market with electricity, Inc;
- Conclude a treaty with some from pool handling settlement business on PXE;
- Conclude a treaty with PXE.

Participants realize all appurtenances will enable PXE interface to the business systém House and provides necessary software. If participant traffic will take concern in using personal software at access to the stock list system, PXE him on the basis his applications forwarding all necessary information to realization requisite solving.

3.2 Traffic

Subject traffic are supplies seat power control energy in electricity supply system net Czech republic.

Definition do business contracts establishes PXE on the basis proposals participants traffic in special recipe House. Awards supplies are determine in EUR/MWh.

Personal traffic proceeds in electronic system House. Every participant do business through orders engaged to the stock list system. Traffic begins sale, to which they may get - togethers traffic put in his orders. Receiving orders to the sale begins after closure continual traffic previous of the day and ends in morning o'clock next business of the day, when will get to her evaluation - pointing incoming voucher orders, rode it possible, and initiation continual traffic for given to business day.

Orders unsatisfied in auction regime fluently cross over to the continual traffic, if it makes possible their time force.

After interpolation any orders system will carry out check, whether just engaged order can be satisfy against order before now engaged to the system. If yes, will get to realization business, if no, order is saved to the system on time specified participant traffic (default to the end business of the day) and waits, whether will may be full of or in part satisfaction compared to some from later engaged orders.

Price realized orders is able to move only in definite zone, defined PXE, from final awards previous business of the day. Should had get to pointing orders except defined zone, will get to detention traffic on time intended edgewise PXE and after a period of those waiting period will get only to realization business outside defined zone and to enlargement hereof zone. Will get if along waiting period to setting orders and resulting realization business inside originally defined zone, waiting period quashes and traffic gets on with originally adjusted characteristics.

Apiece realized operation PXE will charge a fee according to valid tariff.

3.3 Creators market

Creators market are get - togethers traffic, who by contract fills PXE offer without end awards on choice contracts, namely how on selling, so on purchase side through setting valid orders to the system House. In the event of, that some of these orders is conjugate with order any participant traffic, is market maker obliged in mentioned time interval renew missing order in system.

Creators market they may function on all contracts intended for regime market maker edgewise PXE and in this case will obtain such participant traffic expressive reduction in price on charges invoiced edgewise PXE on all operation realized through PXE.

Functions- if market maker only on some contracts intended for this regime, is reduction in price on charges valid only for operation with products, where functions given to participant traffic like market maker. Further in this case has market maker right interrupt his activity like market maker on maximum 200 o'clock per annum, if its intention interrupt this activity will announce House at least tridium in advance.

4 SHOW-DOWN FUTURES CONTRACTS WITH ELECTRICITY

4.1 What includes show - down futures contracts with electricity

Show - down includes:

- a) running daily calculation gains and wastes from open positions previous of the day and newly open positions postneuritic from realization contracts actual of the day - to financial settlement gains and wastes happens always in morning o'clock next working of the day after day traffic,
- b) everyday registration realization resulting from reserved futures contracts, which are in van period, in revolutions per minute and settlement back payments behind supply electricity among customer and supplier,
- c) calculation obstruction needs and lead accounting compound margin apiece participant traffic,
- d) payment charges behind traffic and show - down.

Whole show - down proceeds in EUR.

Description way and course show - down will determine recipe Univyc „rules show - down business reserved on Prague energy exchange" (further only „rules show - down"), that is of set on Internet pages PXE.

4.2 Get - togethers show - down futures contracts with electricity

Participants show - down are:

- a) clearing market banks representative participants traffic in system show - down,
- b) Univyc, Inc. like subject, which faces participants traffic amounts with their openpositions and interlocks show - down reserved business,
- c) Central Counterparty, Inc. (see. central adverse party in rules show - down), which enters to the system show - down like adverse party of each of participant traffic in eat reserved business.

Necessary presumption show - down business with electricity is contract among participant traffic and clearing market bank about reservation show - down in EUR.

All back payments related show - downs futures contracts with electricity inclusive administration obstruction deposits and paying charges interlocks behind participant traffic clearing market bank.

Every participant traffic is able to derive benefit from services only one's clearing market banks, whereas is also competent clearing market pool change.

4.3 Cascading

Yearly and quarterly set futures contracts with electricity having finished last of the day traffic replaces shorter set futures next in a way:

- yearly set replaces moon set futures with supply on January, February and March and quarterly set with supply in the second, third and fourth quarter,
- quarterly set futures contracts replaces moon set futures contracts with supply in appropriate months given to cascading quarter.

Open position participant traffic enter after cascade to the shorter set futures in same sizes, of what have had having finished traffic finished set futures. First month subsequent to cascade is month, in which happens to physical show - down futures contracts.

Other months/quarter, which are not in van period, and henceforth do business like futures contracts.

4.4 Margin and risk management

Every participant traffic is obliged provide guarantees behind show - down his businesses reserved on PXE in practice margin.

Margin is in EUR and their height on individual set futures will determine PXE. Their actual height is making public on Internet pages www.univyc.cz and www.pxe.cz. In the same way is made public minimum margin deposit requisite after participant traffic, that is not creator market, and after participant traffic, that is of creator market.

Margin may be fanfold in money or in banker's indemnity juxta ratam given Rules show - down.

Height obstruction requirement bears:

- a) with open position participant traffic,
- b) with development gains and wastes (so - called mark- it- mark settlement) along traffic.

Ad a) The amount of obstruction requirement from open position is count every day having finished traffic and coming - out from sizes open position on given to set futures. In phase, when happens to registration realization in revolutions per minute and then to physical supply electricity, is after participant traffic on the side supplies and on the side taking requisite so - called delivery margin.

Calculation obstruction requirement contain rules show - down. In the event of, that having finished business of the day is rated general requisite margin superior to currently registered margin

deposit, Univyc about it informs participant traffic and his clearing market pool et sequentia working day appropriate poverty of automatically collects.

4.4.1 Limit obstruction requierement (limit open position)

Clearing market bank has right participant traffic, with which has reserved contract about reservation show - down, determine height limit obstruction requierement orient from actual open position participant along traffic. At his overfullfilment is able to bank set using next suit:

- a) PXE will stop participant traffic possibility nesting of other orders, or
- b) PXE will stop participant traffic possibility nesting of other orders and at once prefacing disturbance of all intermediate, till this time disparte orders.

Ad b) along business of the day Univyc monitors development gains and wastes resulting from reserved business and development course set futures and weigh against is compound obstruction deposits.

For following development gains and wastes will determine 2 limits - check and vindictive, for which pays next relation:

Check limit = on deposit margin deposit * coefficient L1

Vindictive limit = on deposit margin deposit * coefficient L2

Coefficient L1 and L2 will determine PXE. Progresses at overfullfilment limit are mentioned in rules traffic PXE and rules show - down.

4.4.2 Check limit

At overfullfilment check limit businessman mustn't it escalate his open position and Univyc will urge participant traffic through his clearing market banks instantaneous completion obstruction deposit. If to completion obstruction deposit will get, automatically mark - up check limit participant traffic, which so is able to further continue in traffic on PXE.

If with completion obstruction deposits clearing market bank will not agree, stays valid, that participant traffic mustn't it open up new position, which is supervizory by PXE.

4.4.3 Vindictive limit

Overfullfilment vindictive limit is considered behind serious misconduct infirngement traffic. At his overfullfilment start Univyc and PXE forthwith act upon suit in advance for appropriate participant traffic given clearing market bank. Clearing market bank has possibility foreordain next processes:

- a) PXE will stop participant traffic possibility nesting of other orders, or
- b) PXE will stop participant traffic possibility nesting of other orders and at once prefacing disturbance of all intermediate, till this time disparte orders, or
- c) PXE will stop participant traffic possibility nesting of other orders, at once prefacing disturbance of all intermediate, till this time disparte orders and to the 20 minutes from overfullfilment vindictive limit prefacing cutting - off open positions participant traffic.

Clearing market bank, which elect default progress a) or b), has always possibility Univyc in writing ask for enclosure open positions his participant traffic. Initiation ofcutting - off will get after 20 minutes from takeover written requierement.

4.4.4 Personal check limit banks

Except above - mentioned limit (KL and SL) has bank possibility assesment personal check limit for everyone his participant traffic, for him interlocks show - down. This limit Univyc no monitors.

4.4.5 Using obstruction deposits

Obstruction deposits are used:

- a) in the event of poverty of monetary agents on show - down,
- b) on composition price differences from carried reserve business,
- c) on composition of all consequences incurred by, that not enough to enregistration realization in revolutions per minute (above all to settlement departures account for revolutions per minutecentral adverse party), in the event of, that unsuccessful ensure compensation deals,
- d) on enclosure positions.

While using margin according to writing. a) as far as c) must be margin next accounting day by day their using supplemented on requisite level.

4.5 Show - down in phase physical supplies

To final show - down futures, then to show - down physical supplies, happens every day throughout month, in which is given to set futures in van period.

Registration realization contain two - sided terms corresponding sizes open position given to set futures having finished traffic in by this one set. Price, behind which dealings throughout van month settle, is closing price show - down given to set futures rated according to stock list order „standardization commodity futures contracts”. Couterparty participant traffic in registered realization is always Central Counterparty.

Final show - down rests in daily (from Monday by Saturday) enregistration realization in revolutions per minute always on following days and to satisfaction final sums show - down in working day subsequent to registration realization (i. e. on a day delivery electricity). Realization respective to gout working free time and state holidays are to the revolutions per minute registered always in the previous working day. E.g. on Friday are near revolutions per minute registered realization on Saturday, Sunday and Monday and to their satisfaction happens on Monday.

Net price amount show - down is always in EUR and is topped about VAT.

4.6 Compensation deals

Compensation deals initiate Univyc in the event of, that was withheld realization near revolutions per minute or was accession to cutting - off positions some participant traffic.

Compensation deals accomplishes under the direction of Univyc PXE namely so, that will close appropriate position directly in the marketplace or that will address market maker, whose duty is give price offer to appropriate position futures. At address creators market Univyc shortlisting price best bid and will call on break down participant, to with choice creator market concluded compensation deals.

If was compensation deals realized on the ground of rebuff registration realization in revolutions per minute, is newly in revolutions per minute registered realization, on whose one's side gets off against Central Couterparty choice market maker.

4.7 Charges

Participant traffic gains every day in set preliminary information on payments information about height charges behind traffic and show - down. Information on charges is mentioned net of VAT.

Charges are collect at the beginning next months namely inclusive of VAT. O general height charges .VAT, which will collect from account clearing market banks, is participant traffic and his clearing market bank well - informed in accounting day previous day, in which will charges collect in set preliminary information on payments.

5 CONCLUSION

Czech Republic has expressive substitution industry - escalation awards electricity mostly primarily limps on production and manufacturing undertakings, whose load sum behind electricity dizzily soars. Long ago are away times, when thanks prices energy could undertakings turn st. to good account load competitive advantage. S growth prices energy are undertakings compulsory, want to- if in of competition environment hold out, search savings in technologies, systems or producers. In the marketplace with electric energy get to change in determination rules games at assesment awards electricity. From halves of the year 2007 starting coil new way sales electricity - power House. Electricity so in Czech Republic newly becomes subject traffic on Change. Her price is now determining only and entirely actual as far as long - term demand and offer, alike like the ones them to a more known joint - stock market.

However it, how House with price electricity cuckolded, depends on to many factors. Assume that rise power House faces to price - cutting tonic electricity, is misguided. I thanks big and evergrowing demand after electricity in all of Europe, dull sources and in the concrete in Czech Republic always some dominant manufacturers it is impossible generally in near time reason about about it that will get to expressive retardation or even to stopping growth prices. Rather on the contrary. Till this time yearly undertakings linked send out chart implied trust annual consumption on period one's of the year. If with supplier arrange with on price, maturity and next appurtenances, underwrote yearly contract about supplies, which was more or less identical with their competition, beyond got company fixed price electricity on period one's of the year.

Rise power House switched tenet purchase energy, which of principle in a way he began work course and processes firms. Companies he began offer possibility determine way purchase energy, drive diversification connected with growth awards electricity and work so positively (and or, in the event of mistaken decision, negatively) his competitive advantage. What then stock list system companies brought? Undertakings they may then newly watch development prices in a market and accordingly they may do decision, whether want to make safe given to price level let's say on two for three years forward, if believes, that price seat power control energy will go up. Believes if on the contrary, that price seat power control energy will sink, will try making safe his power needs what shortest time and use possible fall prices.

Company must be then in finale capable actively create policy purchase energy. Hereto needs indeed have management firm brightly fixed term vision and business plans, master principles pricing in conditions transformative pivotal factors, start think in context and to the by - and - by.

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